M-Coin Integration Guide

Carrier Billing

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Version Control

Version	Date	Author	Changes
V1	26-01-2011	João Rebelo	Web Payment Interface
V2	23-02-2011	João Rebelo	Mobile Payment Interface
V3	08-04-2011	João Rebelo Kiruba Eswaran Pedro Monteiro	Clarification on the WPI usage Document design review In-App API
V4	21-04-2011	João Rebelo	WPI with inPage mode
V5	22-06-2011	Luis Varandas	InApp Integration review
V6	22-09-2011	Daniel Branco	MPI Update with whole functionality.
V7	09-02-2012	Rui Cunha	WPI after transaction ends functionalities
V8	06-03-2012	Kiruba Eswaran	MPI Re-phrasing the text
V9	29-03-2012	Rui Cunha	WPI countryCode as mandatory field, removed the country discovery through IP
V10	04-05-2012	Daniel Branco	Changing the name of the MPI parameter ProdDesc to ProductDesc

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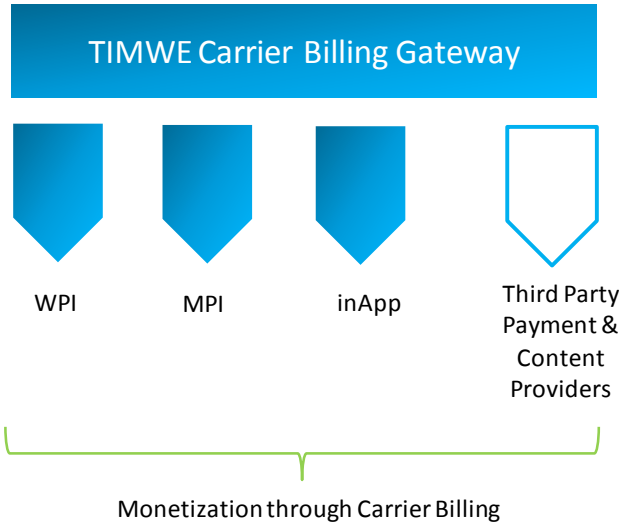
Introduction

Through the exploitation of our know-how in mobile payment solutions, we aim to bring to developers and end-users the safest and most efficient form of payment available through our MCoin brand.

The following document describes the Micro-Billing interfaces (Illustration below) available to partners, and how they can integrate them in order to perform various billing transactions to their customers.



Web Payment Interface – Purchase online without ever leaving the site!

Mobile Payment Interface – Pay on the move for Mobile Web.

In-App Payment Interface– Tap & buy, that's currently available only for Android.

TIMWE offers variety of solutions for monetization through carrier billing for both Web and Mobile.

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1. Web Payment Interface (WPI)

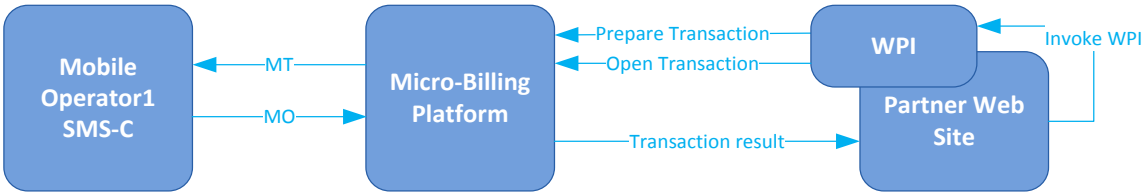

Figure 1: WPI Transaction Flow

This web interface as described in the Figure above is a JavaScript call made in partners' web pages that will open our Web Payment interface (WPI) to interact with the customer and perform the transaction.

Our WPI may be presented in two ways, integrated at the partner web site in a specific div or as a modal pop up.

Keep in mind that even using an inPage div it's possible to change the initial charging value and the product being bought. This allows presenting, on page load, a default buying option and if the user would like to change (buying a bigger amount of the good) he can do it naturally.

The inPage div will occupy an area of **600x400** and must be identified with the div id as "**mcoinWPI_wrapper**" to correctly load. Follows an example for the div:

Upon transaction end (with or without success) the partner platform will be asynchronously notified of the transaction result.

When the transaction ends the user will be redirected to an URL defined by the partner, or, if the URL is not defined, our WPI will call a JavaScript method that the Partner can implement to fulfill their own requirements:

function *mcoinCallBack(value){*

}

The parameter **value** will have one of two possible values: **'success'** or **'error'.**

Follows code snippet on how to invoke and update (for the inPage mode) the WPI widget:

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<script src="http://mb.timwe.com/wpi/resources/mcoinWPIscript.js" type="text/javascript"></script>

mCoinWPIwidget.startParams('partnerRoleId', 'passwordHash', 'purchaseValue', 'productId', 'clientId', 'countryCode', 'operatorId', 'msisdn', 'extTxId', 'inPage',' successUrl',' errorUrl');

Parameter Name	Description
partnerRoleId	Partner Identification
passwordHash	A hexadecimal string containing the MD5 hash on the partner password + ExtTxId string concatenation.
productId	Partner Product ID (available product IDs have been provided by your account manager)
purchaseValue	Value to be charged on the customer. The best approximation will be used if the exact value can't be charged.
clientId	If filled, this parameter will be returned on transaction end. Partner auxiliary field to identify its customers
countryCode	Country Identifier (see Table 1: Country Operator Table for available Country Ids).
operatorId	Optional Parameter: Operator Identifier (see Table 1: Country Operator Table for available Operator Ids). If not provided the WPI will request or find it
msisdn	Optional Parameter: Destination MSISDN. If not provided the WPI will request or find it
extTxId	Partner unique alphanumeric transaction Id
inPage	States in which mode the WPI should present: 1: InPage 0: Model Pop Up
successUrl	Optional Parameter: URL to where the customer will be redirected after the transaction is complete
errorUrl	Optional Parameter: URL to where the customer will be redirected, should a problem occur.

The Password Hash gives this protocol the safety within the web. Being a one-time password impossible to reuse it or create new ones, this element will authenticate our partners into our platform.

This parameter must then be filled with the result of the following hash function. Note that **the concatenated string (partnerPassword + extTxId) must be encoded in UTF-8** before applying the MD5:

passwordHash = MD5 (partnerPassword + extTxId)

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In a concrete example where the partner password is “pass” and the extTxId is “pdgje9876” the hash should be processed as MD5(“passpdgje9876”) which is `99fe5d02fff2f9f832824a0cebc9d7e9`.

Upon transaction end the Micro-Billing platform will notify the partner using an asynchronous HTTP call with the following parameters:

Parameter Name	Description
CountryId	Country ID (see Table 1: Country Operator Table for available Country Ids)
CountryISO	Country two letter ISO 3166 code (see http://www.iso.org/iso/country_codes.htm)
ProductId	Partner Product ID (available product IDs have been provided by your account manager)
ChargedValue	Effectively charged value to the customer
OpId	Operator Id (see Table 1: Country Operator Table for available Operator Ids)
Origin	Origin MSISDN
TxId	Micro-Billing platform unique transaction Id
ClientId	Optional parameter: If a ClientId was provided on the WPI invocation then it will be returned on this call.
extTxId	Partner unique alphanumeric transaction Id provided when opening the transaction

On this call the Micro-Billing Platform expects one of these possible result values in a single text line:

Numeric code <= 0 – General Error (in this case retries will be attempt)

Alphanumeric code – Successfully processed

If timeouts are detected by the Micro-Billing Platform then this method is recalled during one day always using the same Micro-Billing Platform unique transaction Id (the TxId parameter).

Please take this into consideration when processing this notification method in order to avoid duplicated transactions.

This method uses a fixed origin IP from within our network, which is 193.126.233.67.

Example:

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With standard characters as Password and ExtTxId:

- WPI invocation

<script src="**http://mb.timwe.com/wpi/resources/mcoinWPIscript.js**" type="text/javascript"></script>

mCoinWPIwidget.startParams('1', '99fe5d02fff2f9f832824a0cebc9d7e9', '200', '1', '7238oj', '351', '10', '918697677', 'pdgje9876', 1, 'page/success.html', 'page/error.html');

- Method call

http://<PartnerWPIAddress>?CountryId=351&CountryISO=PT&ProductId=1&ChargedValue=200&OpId=10&Origin=918697677&ClientId=7238oj&TxId=321088&ExtTxId=pdgje9876

- Method return

0u9dpsadlkj

With non-standard characters as Password and ExtTxId:

(Be sure to encode the string in UTF-8 before applying the MD5)

- WPI invocation

<script src="**http://mb.timwe.com/wpi/resources/mcoinWPIscript.js**" type="text/javascript"></script>

mCoinWPIwidget.startParams('1', 'f52f3dae5961a5dfa15de5e99a076b03', '200', '1', '7238oj', '351', '10', '918697677', 'NãNStd!', 1, 'page/success.html', 'page/error.html');

- Method call

http://<PartnerWPIAddress>?CountryId=351&CountryISO=PT&ProductId=1&ChargedValue=200&OpId=10&Origin=918697677&ClientId=7238oj&TxId=321089&ExtTxId=NãNStd!

- Method return

1

2. Mobile Payment Interface (MPI)

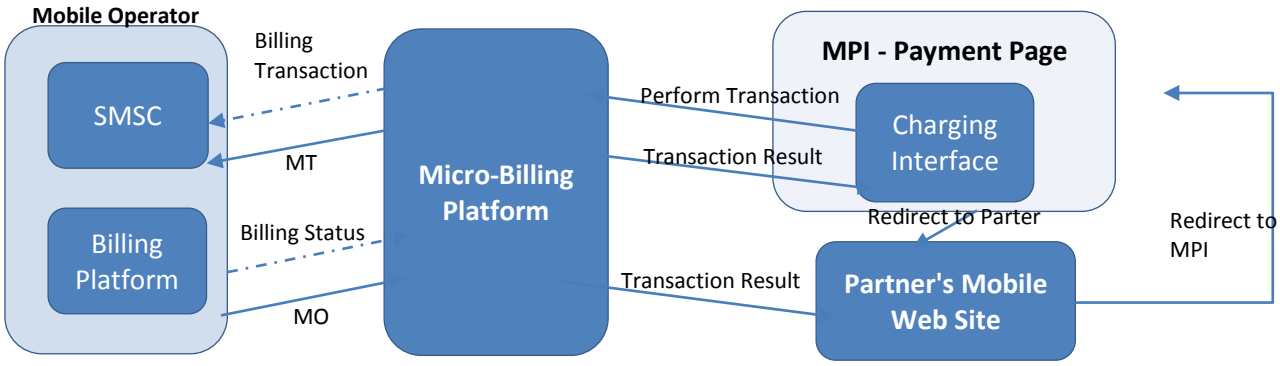

Figure 2: MPI Transaction Flow

This mobile interface, as described in the Figure above is used to do a charge within a Mobile Website. It works both on Feature phone as well as Smart Phone browsers.

In this payment interface, the partner will be responsible for invoking M-Coin's Mobile Payment Interface (MPI), and at the end of the transaction, the customer will be returned back to the partner's site.

Upon the end of the transaction (with or without success), the partner platform will be asynchronously notified on back end of the transaction result. Also the MPI Site will automatically redirect the customer into the partner site so that the user can continue his navigation.

Follows a description on the URL that must be used to redirect the customer into the MPI site:

http://mb.timwe.com/mpi?PartnerRoleId='partnerRoleId'&PasswordHash='passwordHash'&CountryId='countryId'&ProductId='productId'&PurchaseValue='purchaseValue'&ProductDesc='prodDesc'&ReturnUrl='returnUrl'&ExtTxId='extTxId'&ClientId='xpto'

Parameter Name	Description
partnerRoleId	Partner Identification
PasswordHash	Hash calculated using the concatenation of Partner Password + ExtTxId and applying the MD5 algorithm over that concatenation, ensuring security to the transaction.
CountryId	Country ID (see Table 1: Country Operator Table for available Country Ids)
ProductId	Partner Product ID (available product IDs have been provided by your account manager)
PurchaseValue	Value to be charged on the customer. The best approximation will be used if the exact value can't be charged.

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ClientId	If filled, this parameter will be returned on transaction end. Partner auxiliary field to identify its customers
ProductDesc	A textual description of what is being bought by the customer. This text will be presented on the interface
ReturnUrl	URL to where the customer will be redirected after the transaction end, it should be enconded using UTF-8.
ExtTxId	Partner unique alphanumeric transaction Id

The MPI site will require the partner's customer (the user) to wait until the transaction ends.

During this time the customer's browser will be auto-refreshing every few seconds and be asking for the status of the transaction. At the end of the transaction, the customer will be redirected to the *ReturnUrl* specified by the partner.

If for some reason (i.e.: a MT notification taking long time to reach us) the transaction reaches a timeout, there will options for the customer to continue waiting for the transaction status or go back to the partner site. In case that the customer decides to go back to the partner's site, MPI will continue waiting on the back-end for the transaction to end for the following 24 Hours.

Upon the end of the transaction, the Micro-Billing platform will notify the partner on the back-end using an HTTP call with the following parameters:

Parameter Name	**Description**
CountryId	Country ID (see Table 1: Country Operator Table for available Country Ids)
CountryISO	Country two letter ISO 3166 code (see http://www.iso.org/iso/country_codes.htm)
ProductId	Partner Product ID (available product IDs have been provided by your account manager)
ChargedValue	Effectively charged value to the customer
OpId	Operator Id (see Table 1: Country Operator Table for available Operator Ids)
Origin	Origin MSISDN
TxId	Micro-Billing platform unique transaction Id
ClientId	Optional parameter: If a ClientId was provided on the WPI invocation then it will be returned on this call.

On this call the Micro-Billing Platform expects one of these possible result values in a single text line:

Numeric code <= 0 – General Error (in this case retries will be attempt)

Alphanumeric code – Successfully processed

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If timeouts are detected by the Micro-Billing Platform then this method is invoked for 24 Hours always using the same Micro-Billing Platform unique transaction Id (the TxId parameter).

Please take this into consideration when processing this notification method in order to avoid duplicated transactions.

On the method return, the partner must provide a unique alphanumeric transaction ID, which can be used to correlate with the Micro-Billing Platform unique transaction ID.

This method uses a fixed origin IP from within our network, which is 193.126.233.67.

Example:

- MPI invocation

  http://mb.timwe.com/mpi?PartnerRoleId=5&PasswordHash=bff56d7c5206059b8a0eb5b093f45c8e&PurchaseValue=200&ProductId=1&ClientId=7238oj&ProductDesc=um+teste&ReturnUrl=<PartnerMPIAddress>&ExtTxId=ljhgjk7820&CountryId=351

- Method call

http://<PartnerMPIAddress>?CountryId=351&CountryISO=PT&ProductId=1&ChargedValue=200&OpId=10&Origin=918697677&ClientId=7238oj&TxId=321088

- Method return

0u9dpsadlkk

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3. In-App for Android (In-App API)

This In-App API for Android as described in Figure 3: InApp API Transaction Flow is a library API for any Android application that will open specific dialogs walking the user through the transaction.

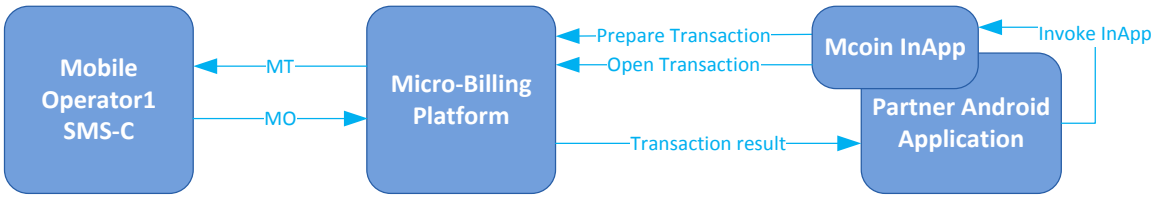

Figure 3: InApp API Transaction Flow

In order to develop the Mcoin app, we have chosen to use the Eclipse IDE with the Android Development Tools (ADT) plug-in.

Follows a description on the steps that must be performed to integrate MCoin library into your project using Eclipse IDE and the Android Development Tools.

3.1 Download Mcoin Zip and Mcoin Jar

The zip and jar are located in the micro billing website, follow the next link:

www.mcoin.com

3.2 Import Mcoin project to your Workspace

After download the necessary files import the Mcoin zip to your workspace.

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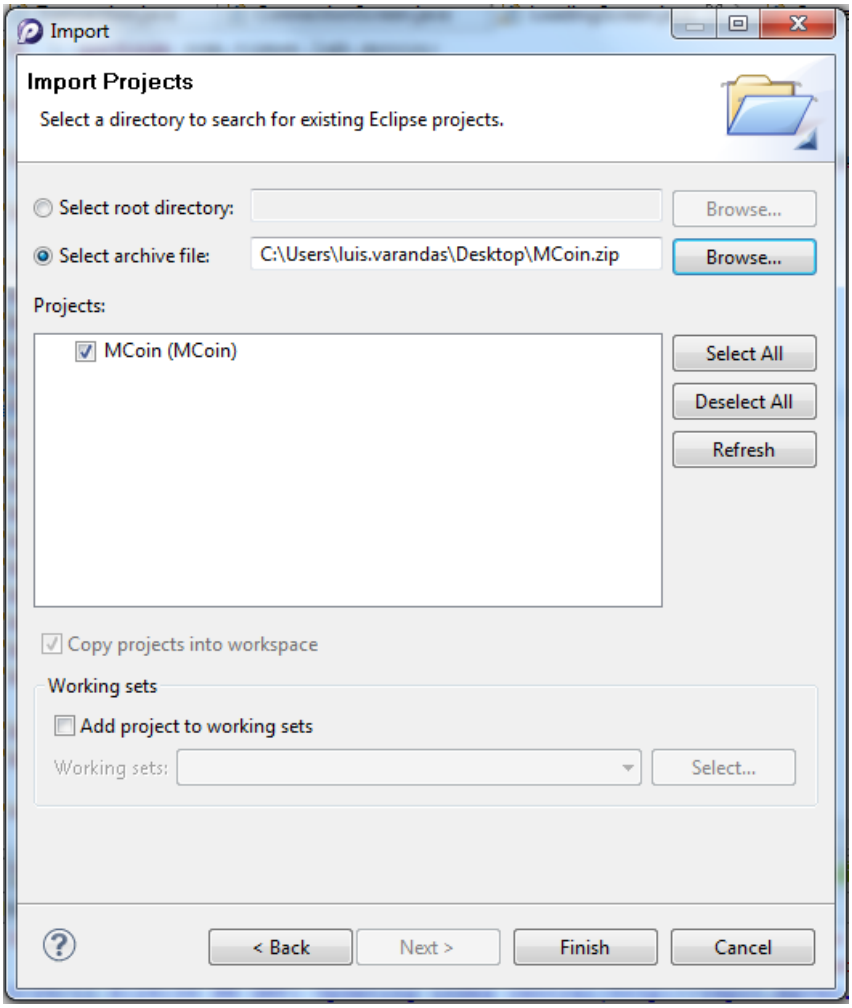

3.3 Copy Mcoin.jar to your workspace

After import the Mcoin project copy the libs.jar to your workspace folder.

3.4 Change the path of the imported libs.jar in java build path properties

After copy the Mcoin.jar to your workspace folder you need to change the path of the imported jar in java build path properties of Mcoin project. To change the path press Edit and browse to your workspace folder.

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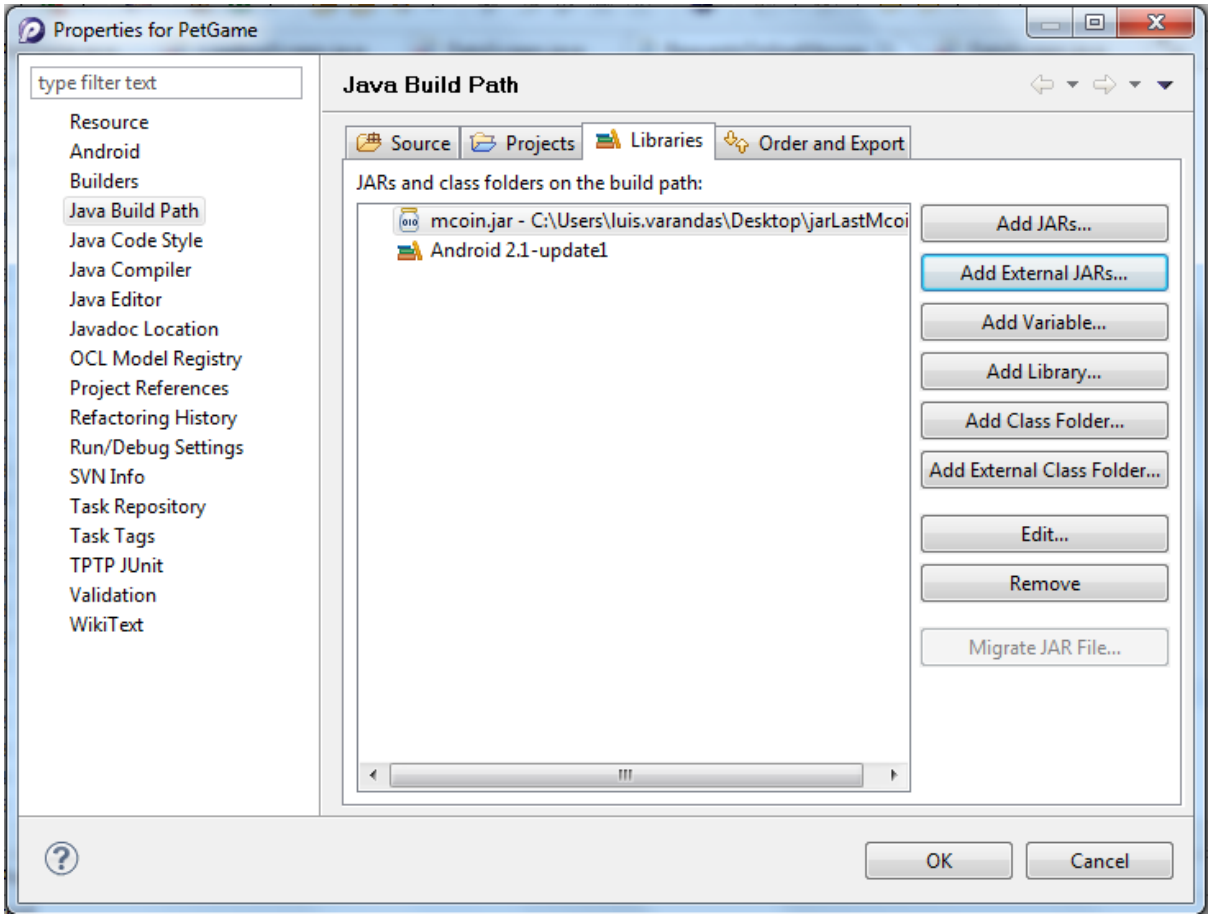

3.5 Clean project if you have some errors

Sometimes after import jar files in eclipse you need to clean project.

3.6 In your project go to Android properties and add Mcoin library

Now without errors in Mcoin you have to add Mcoin library to your project. Go to your project properties and select the Android properties. In this screen press Add in library section and select Mcoin.

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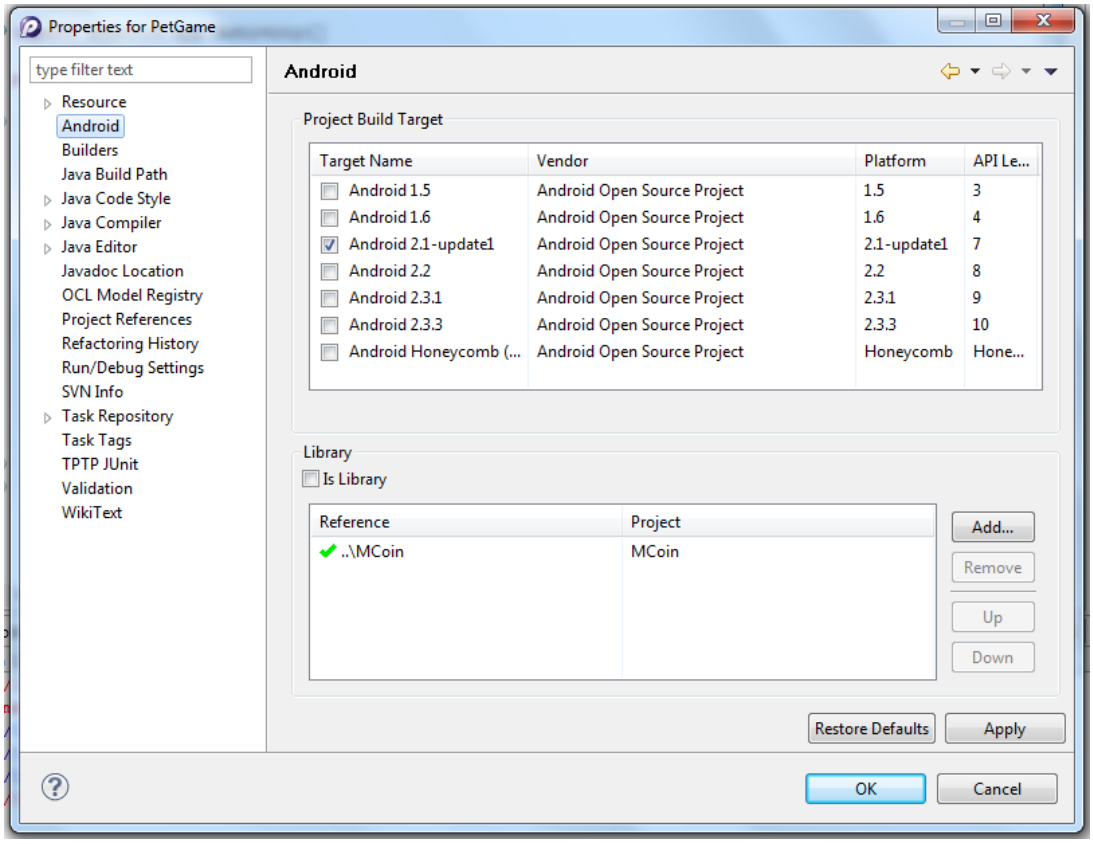

3.7 In your project import Mcoin.jar in java build path properties

After add Mcoin library to your project you need to import Mcoin.jar to your project build path.

3.8 Clean project if you have some errors

Sometimes after import jar files in eclipse you need to clean project.

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3.9 Add an intent-filter to the activity that process the response (AndroidManifest.xml)

In your project you need to add this intent filter to the activity that will process the response.

```
<activity android:name=".CheckResponse">

    <intent-filter>

      <category android:name="android.intent.category.LAUNCHER" />

    </intent-filter>

</activity>
```

3.10 Add the activities of Mcoin library (AndroidManifest.xml)

In your project you need to add these activities because they could be launched by Mcoin during the billing process.

```
<activity android:theme="@android:style/Theme.Dialog"
android:name="com.timwe.mcoin.LoadingScreen"
android:configChanges="keyboardHidden|orientation"/>
<activity android:name="com.timwe.mcoin.DataScreen"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation"/>
<activity android:name="com.timwe.mcoin.Datascreenonline"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation"/>
<activity android:name="com.timwe.mcoin.DataScreenSp"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation"/>
<activity android:name="com.timwe.mcoin.FinalScreen"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation"/>
<activity android:name="com.timwe.mcoin.ConnectionScreen"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation" />
<activity android:name="com.timwe.mcoin.DataScreenSpCache"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation"/>
<activity android:name="com.timwe.mcoin.utils.MTReceiver"
android:theme="@android:style/Theme.Dialog"
android:configChanges="keyboardHidden|orientation"/>
```


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3.11 Add the permissions (AndroidManifest.xml)

In your project you need to add these permissions because these operations could be performed by Mcoin during the billing process.

```
<uses-permission android:name="android.permission.SEND_SMS" />

<uses-permission android:name="android.permission.RECEIVE_SMS" />

<uses-permission android:name="android.permission.READ_SMS" />

<uses-permission
android:name="android.permission.ACCESS_NETWORK_STATE" />

<uses-permission android:name="android.permission.INTERNET" />

<uses-permission android:name="android.permission.READ_OWNER_DATA"
/>

<uses-permission android:name="android.permission.WRITE_OWNER_DATA"
/>

<uses-permission android:name="android.permission.READ_PHONE_STATE"
/>

<uses-permission android:name="android.permission.WAKE_LOCK" />
```

3.12 Call the Mcoin

To call the Mcoin you need to start the LoadingScreen activity with all parameters of Parameters Class.

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```
Intent intent = new Intent(MCoinDemo.this, LoadingScreen.class);
intent.putExtra(Parameters.DESCRIPTION, description);
intent.putExtra(Parameters.PARTNER_ROLE_ID, partnerRoleId);
intent.putExtra(Parameters.PRODUCT_ID, productId);
intent.putExtra(Parameters.CLIENT_ID, clientId);
intent.putExtra(Parameters.VALUE, value);
intent.putExtra(Parameters.PASSWORD, password);
intent.putExtra(Parameters.RESPONSE_PACKAGE, responsePackage);
intent.putExtra(Parameters.RESPONSE_CLASS, responseClass);
startActivity(intent);
```

Call Mcoin API

Parameter	Description
DESCRIPTION	Description of the product that will be purchased
PARTNER_ROLE_ID	Company identifier (provided by the account manager)
PRODUCT_ID	Product identifier (provided by the account manager)
CLIENT_ID	Client identifier (optional parameter, that can be used by the partner to identify its client)
VALUE	Value to be discounted (i.e. 200 = 2€)
PASSWORD	Partner Password (provided by the account manager)
PACKAGE_NAME	Package name of the response activity class
NAME_CLASS	Name of the response activity class

3.13 Create a Response Class

In the activity class that process the response you only need to create a Bundle and get the parameter billingresult. This parameter is always the Sting true or false.

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```
public class CheckResponse extends Activity {

	@Override
	public void onCreate(Bundle savedInstanceState) {
		super.onCreate(savedInstanceState);

		DeviceInformation devInfo = new DeviceInformation();
		Location location = new Location();
		String country = null;
		try {
			country =
devInfo.getCountry(getApplicationContext());
		} catch (IOException e) {

		}
		location.getLocation(this,country);

		boolean paramsresult = false;

		Bundle bundle = getIntent().getExtras();
		paramsresult = bundle.getBoolean("billingresult");
		Log.i("Demo Page Received parameters -> ", "" +
paramsresult);
		if (paramsresult){
	Toast.makeText(getBaseContext(),getString(R.string.BILLING_SU
CCESS), Toast.LENGTH_SHORT).show();
			Intent intent = new Intent(CheckResponse.this,
MCoinDemo.class);
			intent.putExtra("billingresult", paramsresult);
			startActivity(intent);
			finish();
		}
		else{
			Toast.makeText(getBaseContext(),
getString(R.string.BILLING_FAILED), Toast.LENGTH_LONG).show();
			Intent intent = new Intent(CheckResponse.this,
MCoinDemo.class);
			intent.addFlags(Intent.FLAG_ACTIVITY_CLEAR_TOP);
			intent.putExtra("billingresult", paramsresult);
			startActivity(intent);
			finish();
		}
	}
}
```

Response

Parameter	Description
billingresult	Transaction result. Could be “Billing Success” or “Billing Failed”.

If the billing has failed, then the last screen of the mcoin app shall display the error reason:

Parameter	Description
billing failed	- NOT CHARGED - PARTIAL_CHARGED

In the MO Online flow, some errors may be triggered during the requests to the server. Those requests are made before the user presses the *Request* button.

At this point, if an error occur, the Mcoin app will terminate and the error is shown to the user.

Possible Errors
- GENERIC_ERROR_CODE - INVALID_DESTINATION - INVALID_OPERATOR - INVALID_PARTNER_PASSWORD - INVALID_PRICEPOINT - INVALID_PRODUCT - INVALID_COUNTRY - INVALID_DIRECTION - INVALID_CLIENT_PASSWORD - INVALID_TRANSACTION - INVALID_PURCHASE_VALUE - BLOCKED_DESTINATION - MISSING_PARTNER_TRANSACTION_ID - INVALID_TRANSACTION_CODE

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4. Appendix

4. 1 Country Operator Table

Table 1: Country Operator Table

Operator Id	Operator Name	Country Id
25	USA ATT Mobility	1
119	USA Alltel	1
53	USA Boost	1
121	USA Dobson	1
28	USA Midwest Wireless	1
199	USA Nextel	1
52	USA Sprint	1
26	USA T-Mobile	1
23	USA US Celular	1
24	USA Verizon	1
237	USA Virgin Mobile	1
141	RUS MTS	7
143	RUS Megafon	7
144	RUS Utel	7
142	RUS Vimpelcom	7
163	CAN Aliant Mobility	11
158	CAN Bell Mobility	11
162	CAN Fido	11
165	CAN MTS Mobility	11
164	CAN NorthernTel Mobility	11
156	CAN Rogers Wireless	11
159	CAN Sasktell Mobility	11
160	CAN Sprint	11
157	CAN Telus Mobility	11
161	CAN Virgin Mobile Canada	11
79	SAF CELLC	27
78	SAF MTN	27
77	SAF Vodacom	27
117	GRE Cosmote	30
122	GRE QTelecom	30
116	GRE Vodafone	30
118	GRE Wind	30
108	HOL Ben TMobile	31

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27	HOL KPN	31
107	HOL Orange	31
173	HOL TELE 2	31
109	HOL Telfort O2	31
106	HOL Vodafone	31
100	NL Vodafone	31
130	BEL Base	32
129	BEL Mobistar	32
128	BEL Proximus	32
135	FRA Bouygues	33
134	FRA Orange	33
136	FRA SFR	33
62	ESP Orange	34
14	ESP Movistar	34
29	ESP Vodafone	34
51	HUN Pannon	36
50	HUN T-Mobile	36
236	HUN Vodafone	36
248	ITA Tim	39
249	ITA Vodafone	39
250	ITA Wind	39
74	SWI ORANGE	41
76	SWI Sunrise	41
75	SWI Swisscom	41
154	AUT Drei	43
150	AUT Mobilkom	43
152	AUT One	43
153	AUT Telering	43
151	AUT Tmobile	43
91	GBR 3G	44
89	GBR O2	44
90	GBR Orange	44
88	GBR T Mobile	44
92	GBR Virgin	44
87	GBR Vodafone	44
233	SWE Tele2	46
21	SWE Telenor SE	46
234	SWE Telia	46
232	SWE Three	46
256	NOR Netcom	47
255	NOR Tele2	47
13	NOR Telenor	47
94	POL Era	48
93	POL Orange	48

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95	POL Plus	48
169	GER Debitel	49
98	GER EPLUS	49
97	GER O2	49
56	GER T-Mobile	49
99	GER Vodafone	49
48	PER Claro	51
30	PER Movistar	51
16	MEX Telcel	52
372	MEX Movistar	52
389	MEX Lusacell	52
508	MEX Nextel	52
42	ARG CTI	54
112	ARG Movistar CDMA	54
43	ARG Movistar GSM	54
46	ARG Personal	54
5	BRA BRT	55
8	BRA CTBC	55
3	BRA Claro	55
9	BRA Nextel	55
2	BRA Oi	55
228	BRA Pure Bros	55
7	BRA Sercomtel	55
6	BRA Telemig	55
4	BRA Tim Brasil	55
1	BRA Vivo	55
178	CHL Claro GSM	56
41	CHL Entel	56
39	CHL Movistar	56
40	CHL Smartcom	56
17	COL Comcel	57
18	COL Mobiles Ola	57
19	COL Movistar	57
198	COL Tigo	57
54	VEN Digitel	58
138	VEN Infonet	58
55	VEN Movilnet	58
45	VEN Movistar	58
188	MAL CELCOM	60
190	MAL DIGI	60
187	MAL MAXIS	60
191	MAL TIME	60
189	MAL TMTOUCH	60
257	AUS Hutchinson 3	61

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80	AUS Optus	61
81	AUS Telstra	61
83	AUS Virgin	61
82	AUS Vodafone	61
139	NWZ Telecom	64
140	NWZ Vodafone	64
223	KAZ kcell	71
85	TUR Avea	90
86	TUR TelSim	90
84	TUR Turkcell	90
261	TUR Vodafone	90
44	MAR Maroc Telecom	212
32	MAR Meditel	212
241	MOZ MCEL	258
242	MOZ Vodacom	258
49	DEN Unwire	350
11	POR Optimus	351
10	POR TMN	351
12	POR Vodafone	351
70	IRL Meteor	353
72	IRL O2	353
71	IRL Vodafone	353
69	LIT Bite	370
68	LIT Omnitel	370
38	LIT Tele2 Lituania	370
231	LAT Bite	371
67	LAT LMT	371
66	LAT Tele2	371
230	LET Bite	371
47	LET Tele2 Letonia	371
15	EST EMT	372
22	EST Tele2 Estonia	372
64	UKR Kyivstar	380
63	UKR Life	380
155	CRO T-Mobiel	385
137	CRO VipNet	385
59	CZH O2	420
60	CZH Tmobile	420
61	CZH Vodafone	420
57	SLK Orange	421
58	SLK Tmobile	421
208	GUA Claro	502
254	GUA Telefonica	502
222	ESV Digicel	503

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221	ESV Movistar	503
240	ESV Telecom	503
226	SAL Digicel	503
239	SAL Telefonica	503
220	SAL Telemovil	503
205	HON Celtel	504
209	HON Claro	504
247	NIC Claro	505
225	NIC Enitel	505
171	COS ICE	506
34	COS ICE	506
213	PAN Cable and Wireless	507
110	PAN Telefonica CDMA	507
73	PAN Telefonica GSM	507
96	BOL Entel	591
33	BOL Nuevatel	591
111	BOL Telecel	591
170	ECU BAU	593
124	ECU METROMOVIL	593
172	ECU MOVISTAR	593
65	ECU PORTA	593
115	PAR Personal 99512	595
210	PAR SDSA	595
123	PAR Tigo	595
148	PAR VOX	595
126	URU Ancel	598
127	URU CTI	598
125	URU Movistar	598
291	DOM Claro	809
297	DOM Orange	809
145	TW CHT	886
147	TW FET	886
146	TW TCC	886
194	JOR MobileCom	962
246	JOR Orange	962
238	JOR Umniah	962
193	JOR ZAIN	962
196	KUW MTC	965
197	KUW Wataniya	965
253	OMAN Nawras	968
215	DUB Etisalat	971
175	ISR CellCom	972
227	ISR MiRS	972
176	ISR Orange	972

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177	ISR Pelephone	972
20	GEO Geocell	995
214	GEO Magti	995

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